

Facts Concerning Broadband Access –

Reasons Why Arkansas Needs a Comprehensive Solution Now

- 1. Arkansas ranks at or near the bottom in national rankings of digital learning and broadband access.
 - The 2012 "Digital Learning Now" report from the Foundation for Education Excellence in Education gave Arkansas an "F" for digital learning opportunities.
 - TechNet's 2012 Broadband Index listed Arkansas as 50th among all states for broadband access
- 2. Schools need high speed internet access to meet digital and distance learning requirements, participate in professional development opportunities, and implement new learning management tools.
 - Act 1280 requires high schools offer one or more digital learning courses to incoming ninth graders beginning 2014-2015.
 - Partnership for the Assessment of Readiness for College and Careers (PARCC) assessments, based on the Common Core State Standards, may require as much as 30 Kbps to administer a low-cache model or 60Kbps for the fully online version.
 - The new Arkansas Teacher Evaluation System (TESS) and Arkansas Ed-Fi Dashboards (which allow educators to use real-time data at the student, classroom, teacher, school and district levels) require increased access to Internet bandwidth.
- 3. Department of Information Services data show that, of the 509 points of demarcation serving Arkansas Public Schools, only 12 percent (59 locations) have the recommended broadband capacity and connectivity speed for 2014-15. The State Educational Technology Directors Association (SETDA) recommends 100 Mbps per 1,000 students and staff.
 - The average Arkansas school district with 1,800 students currently has 40 Mbps of bandwidth and needs 140 Mbps more.
 - SETDA recommends 1 Gbps per 1,000 students for 2017-18 and beyond.
- 4. The lack of broadband capacity in schools negatively impacts teaching and learning as well as rural economic development.
 - A 2011 study conducted by Arkansas Association of Educational Administrators found 80 percent of district administrators experienced problems with bandwidth in the previous year, 78 percent want to implement technology initiatives but can't due to bandwidth limitations, and 84.5 percent had to restrict access to educationally relevant or useful sites due to bandwidth concerns.
 - Also, for every one percent increase in broadband saturation, employment increases 0.2 to 0.3 percent annually.
- 5. New federal and state initiatives coupled with historically low interest rates make statewide broadband investments more politically and economically viable.
 - Connect Ed a new White House initiative to increase broadband in public schools.
 - *E-rate 2.0* a planned overhaul of the Federal Communications Commission program to subsidize school and library telephone and internet services.
 - State High Cost Fund State General Revenue funds for rural broadband expansion will increase by \$22 million in FY 2014.
 - BTOP (ARE-ON) Existing federal investments in fiber-optic lines which connect all of Arkansas's two- and four-year public higher education institutions.

¹ Gillet, Sharon E., William H. Lehr, and Marvin A. Sirbu. (2006). "Measuring the Economic Impact of Broadband Deployment". Final Report. National Technical Assistance, Training, Research, and Evaluation Project #99-07-13829. Submitted to Economic Development Administration, Washington, DC: US Department of Commerce.